

Race, inequality and educational accountability: the irony of ‘No Child Left Behind’

Linda Darling-Hammond*

Stanford University, USA

The No Child Left Behind Act, the major education initiative of the Bush Administration, was intended to raise educational achievement and close the racial/ethnic achievement gap. Its strategies include focusing schools’ attention on raising test scores, mandating better qualified teachers and providing educational choice. Unfortunately, the complex requirements of the law have failed to achieve these goals, and have provoked a number of unintended negative consequences which frequently harm the students the law is most intended to help. Among these consequences are a narrowed curriculum, focused on the low-level skills generally reflected on high stakes tests; inappropriate assessment of English language learners and students with special needs; and strong incentives to exclude low-scoring students from school, so as to achieve test score targets. In addition, the law fails to address the pressing problems of unequal educational resources across schools serving wealthy and poor children and the shortage of well-prepared teachers in high-need schools. A policy that would live up to the law’s name would need to address these issues and reshape the law’s requirements to enable the use of assessments and school improvement strategies that support higher-quality teaching and learning.

In 2002, many Civil Rights advocates initially hailed the Bush Administration’s major Education Bill, optimistically entitled ‘No Child Left Behind’ (NCLB), as a step forward in the long battle to improve education for those children traditionally left behind in American schools—in particular, students of color and those living in poverty, new English learners and students with disabilities. The broad goals of NCLB are to raise the achievement levels of all students and to close the achievement gap that parallels race and class distinctions. On its face, the Act intends to accomplish this by focusing schools’ attention on improving test scores for all groups of students, providing parents more educational choices and ensuring better-qualified teachers.

The agenda is laudable, but this complex 1000-page law has affected states, districts, schools and students in a variety of unintended ways. The nicknames

*Stanford University, School of Education, Stanford, CA 94305, USA. Email: ldh@suse.stanford.edu

proliferating as this intrusive legislation plays out across the country give a sense of some of the anger and confusion left in its wake: ‘No Child Left Untested,’ ‘No School Board Left Standing’ and ‘No Child’s Behind Left’ are just a few of them. More than 20 states and dozens of school districts have officially protested the Act, voting to withdraw from participation, withhold local funding for implementation or resist specific provisions. One state and a national teachers association have brought lawsuits against the federal government based on the unfunded costs and dysfunctional side-effects of the law. Members of the Congressional Black Caucus, among other federal legislators, have introduced bills to place a moratorium on high-stakes standardized testing, a key element of NCLB; withhold school sanctions until the bill is fully funded and require progress toward adequate and equitable educational opportunities for students in public schools. And the Harvard Civil Rights Project, along with other advocacy groups, has warned that the law threatens to increase the growing dropout and push-out rates for students of color, ultimately reducing access to education for these students (Sunderman & Kim, 2004).

As evidence of its unintended consequences emerges, it seems increasingly clear that NCLB as currently implemented is more likely to harm most of the students who are the targets of its aspirations than to help them, and it is more likely to undermine—some would even say destroy—the nation’s public education system than to improve it. These outcomes are likely because the underfunded Act layers onto a grossly unequal school system a set of unmeetable test score targets that disproportionately penalize schools serving the neediest students, while creating strong incentives for schools to keep out or push out those students who are low achieving in order to raise school average test scores.

Furthermore, the Act’s regulations have caused a number of states to abandon their thoughtful diagnostic assessment and accountability systems—replacing instructionally rich, improvement-oriented systems with more rote-oriented, punishment-driven approaches—and it has thrown many high-performing and steadily improving schools into chaos rather than helping them remain focused and deliberate in their ongoing efforts to serve students well.

While well intentioned, it has become clear that the Act will, in the next few years, label most of the nation’s public schools ‘failing,’ even when they are high performing and improving in achievement. Already more than one-third of public schools have been targeted as having failed to make ‘Adequate Yearly Progress’ (AYP), and studies suggest that at least 80% of schools in most states will have failed to achieve AYP by 2014 (see, for example, Wiley *et al.*, 2005). Because of the multiple subgroup targets that must be achieved for different racial/ethnic and income groups on multiple tests—representing more than 30 different targets in diverse schools—and the law’s ‘catch 22’ for English language learners, 99% of California schools are expected to ‘fail’ by this date (Packer, 2004).

A California study found that:

[failing] schools were designated not because tests had shown their overall achievement levels to be faltering, but because a single student group—disabled learners or Asian students, for example—had fallen short of a target. As a result, the chances that a school

would be designated as failing increased in proportion to the number of demographic groups served by the school. (Novak & Fuller, 2003)

This 'diversity penalty' sets up the prospect that the schools serving the neediest students will be first to lose funds under the law. And in some high-achieving states that have set very high standards for themselves, large numbers of schools are dubbed 'failing' because they fall below these standards, even though they score well above most other schools in the nation and the world.

Some believe this is a prelude to voucher proposals aimed at privatizing the education system, since the public will have been besieged with annual reports about failing public schools which the law's unmeetable requirements guarantee cannot be remedied. In addition to the perverse consequences for school systems, the law will lead to reductions in federal funding to already under-resourced schools and it will sidetrack funds needed for improvement to underwrite transfers for students to other schools (which, if they are available, may offer no higher-quality education). If left unchanged, the Act will deflect needed resources for teaching and learning to ever more intensive testing of students, ranking of schools, bussing of students and lawyers' fees for litigating the many unintended consequences of the legislation.

Most unhappily, some of the Act's most important and potentially productive components—such as the effort to ensure all students have highly qualified teachers and successful educational options and supports—are in danger of being extinguished by the shortcomings of a shortsighted, one-way accountability system that holds children and educators to test-based standards they cannot meet while it does *not* hold federal or state governments to standards that would ensure equal and adequate educational opportunity.

Inequality in education: what NCLB does not change

The first problem—one that NCLB does not acknowledge or address—is the enormous inequality in the provision of education in the United States. Unlike most countries that fund schools centrally and equally, the wealthiest US public schools spend at least 10 times more than the poorest schools—ranging from over \$30,000 per pupil to only \$3000; and these disparities contribute to a wider achievement gap than in virtually any other industrialized country. Within states, the spending ratio between high and low spending schools is typically at least 2 or 3 to 1.

The school disparities documented in Jonathan Kozol's (1991) *Savage Inequalities* have not lessened in recent years. As documented in federal statistics and a large number of current lawsuits, schools serving large numbers of low-income students and students of color have larger class sizes, fewer teachers and counselors, fewer and lower-quality academic courses, extracurricular activities, books, materials, supplies and computers, libraries and special services (Darling-Hammond, 2004a). Resources are so severely inadequate in the growing number of 'apartheid' schools serving more than 90% 'minority' students that legal action to challenge school

funding systems is underway in more than half the states. These conditions are vividly illustrated in this description of Luther Burbank Middle School, which serves low-income students of color in San Francisco who are plaintiffs in a school funding lawsuit:

At Luther Burbank School, students cannot take textbooks home for homework in any core subject because their teachers have enough textbooks for use in class only.... Some math, science, and other core classes do not have even enough textbooks for all the students in a single class to use during the school day, so some students must share the same one book during class time.... For homework, students must take home photocopied pages, with no accompanying text for guidance or reference, when and if their teachers have enough paper to use to make homework copies.... The social studies textbook Luther Burbank students use is so old that it does not reflect the breakup of the former Soviet Union. Luther Burbank is infested with vermin and roaches and students routinely see mice in their classrooms. One dead rodent has remained, decomposing, in a corner in the gymnasium since the beginning of the school year. The school library is rarely open, has no librarian, and has not recently been updated. Luther Burbank classrooms do not have computers. Computer instruction and research skills are not, therefore, part of Luther Burbank students' regular instruction in their core courses. The school no longer offers any art classes for budgetary reasons. Two of the three bathrooms at Luther Burbank are locked all day, every day. The third bathroom is locked during lunch and other periods during the school day, so there are times during school when no bathroom at all is available for students to use. Students have urinated or defecated on themselves at school because they could not get into an unlocked bathroom.... When the bathrooms are not locked, they often lack toilet paper, soap, and paper towels, and the toilets frequently are clogged and overflowing.... Ceiling tiles are missing and cracked in the school gym, and school children are afraid to play basketball and other games in the gym because they worry that more ceiling tiles will fall on them during their games.... The school heating system does not work well. In winter, children often wear coats, hats, and gloves during class to keep warm. Eleven of the 35 teachers at Luther Burbank have not yet obtained regular, non-emergency credentials, and 17 of the 35 teachers only began teaching at Luther Burbank this school year. (*Williams v. State of California*, *Superior Court of the State of CA for the County of San Francisco*, 2001, Complaint, 58–66)

Under No Child Left Behind, these dreadful school conditions are left largely untouched. Although the Act orders schools to ensure that 100% of students test at levels identified as 'proficient' by the year 2014—and to make mandated progress toward this goal each year—the small per-pupil dollar allocation the law makes to schools serving low-income students is well under 10% of schools' total spending, far too little to correct these conditions. While the law focuses on test scores as indicators of school quality, it largely ignores the resources that *enable* school quality. It does not provide substantial investments in the under-resourced schools where many students are currently struggling to learn, nor does it require that states demonstrate progress toward equitable and adequate funding or greater opportunities to learn. Although the law includes another set of requirements to ensure that all students receive 'highly qualified teachers,' as discussed in a later section, the lack of adequate federal support for actually making this possible currently makes this promise a hollow one in many communities.

Test or invest? How NCLB treats schools serving the nation's neediest students

The biggest problem with the Act is that it mistakes measuring schools for fixing them. It sets annual test score goals for every school—and for subgroups of students within schools—that are said to constitute ‘Adequate Yearly Progress.’ Schools that do not meet these targets for each subgroup each year are declared in need of improvement and, later, failing. This triggers interventions (notification to parents of the school’s label and a three-month period to write a school improvement plan). Students must be allowed to transfer out of ‘failing’ schools at the school’s expense; schools stand to be reconstituted or closed, and states and districts stand to lose funds based on these designations. Unfortunately, the targets—based on the notion that 100% of students will score at the ‘proficient’ level on state tests by the year 2014—were set without an understanding of what this goal would really mean.

First, of course, there is the fundamental problem that it is impossible to attain 100% proficiency levels for students on norm-referenced tests (when 50% of students by definition must score below the norm and some proportion must by definition score below any cut point selected)—the kind of tests that have been adopted by an increasing number of states due to the specific annual testing requirements of NCLB. Criterion-referenced tests also typically use an underlying norm-referenced logic in selecting items and setting cut scores, although in theory, the target could at least remain fixed on these tests. Even if tests were not constructed in this way, the steepness of the standard is unrealistic. Using a definition of proficiency benchmarked to the National Assessment of Educational Progress, one analyst has calculated that it would take schools more than 160 years to reach such a target in high school mathematics if they continued the fairly brisk rate of progress they were making during the 1990s (Linn, 2003).

Even more problematic is that the Act requires that schools be declared ‘failing’ if they fail to meet these targets for each subgroup of designated students annually. It requires the largest gains from lower-performing schools, ignoring the fact that these schools serve needier students and are generally less well funded than those serving wealthier and higher-scoring students. To complicate things more, those that serve large numbers of new English language learners (what the law calls ‘Limited English Proficient’ [LEP] students) and some kinds of special needs students (what the law calls ‘students with disabilities’) are further penalized by the fact that students are assigned to these subgroups *because* they cannot meet the standard, and they are typically removed from the subgroup when they do meet the standard. Thus these schools will not ever be able to meet the proficiency benchmark the law has set.

For example, section 9101(25) of NCLB defines a LEP student as one ‘whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual *the ability to meet the State’s proficient level of achievement* on State assessments described in section 1111(b)(3)....’ (emphasis added). It seems not to have occurred to policymakers that ordering schools to show 100% proficiency for students in a subgroup that by definition scores below that level on

state tests is ludicrous. Furthermore, as students gain proficiency in English, they are transferred out of this subgroup; thus, it is impossible for 100% of this subgroup ever to reach proficiency. For schools and districts that serve substantial numbers of LEP students, this imposes a ceiling on their overall performance as well as the performance of the subgroup. At some point it will be impossible to make the required gains because of how this subgroup is defined under law. Some advocates have suggested that states be able to count scores of students who are classified as LEP in the AYP calculations for this subgroup as long as they stay in a school (even after they become proficient in English—and presumably come within reach of achieving proficiency on the state content tests). However, the US Department of Education has not approved this definition (Erpenbach *et al.*, 2003).

The same issues pertain to the testing of students with disabilities and to the schools that serve them. Many such students who cannot demonstrate their learning on grade-level tests have individualized education plans that prescribe different assessments for charting their progress, including ‘instructional level’ tests. The Department of Education has ruled that using such tests is permissible only if the results are counted as ‘non-proficient’ or if they apply to fewer than 2% of all test-takers. In addition to the fact that this appears to violate special education laws, schools that serve large numbers of special education students will always be penalized in their rankings. Furthermore, because disabilities are correlated with poverty (which is linked to poor prenatal and childhood health care, low birth weight, poor nutrition, lead poisoning, maternal substance abuse and many other conditions that predict learning problems), this is yet another way in which NCLB punishes schools and districts that serve large numbers of low-income students.

While these are troubling aspects of the law’s implementation, one could also argue, quite legitimately, that at least some of the schools identified as ‘needing improvement’ (a designation that changes to ‘failing’ if targets are not met after three years) indeed are dismal places where little learning occurs, or are complacent schools that have not attended to the needs of all their less advantaged students—schools that need to be jolted to change. And, it is fair to suggest that underserved students in such schools deserve other choices if they cannot change.

These important arguments are part of the law’s theory of action: that low-quality schools will be motivated to change if they are identified and shamed, and that their students will be better served if given other educational options. These outcomes may in fact occur in some cases. The problem is that the law actually works in many other cases to label schools as failing even when they are succeeding with the very students the law wants to help, and it creates incentives that can reduce the quality of education such schools can provide, while providing few real options for their students to go to better schools.

How might the goal of improving schools actually, paradoxically, undermine them? First, there is evidence from states that have used similar accountability provisions—applying labels of failure to low-scoring schools that serve low-income students reduces the schools’ ability to attract and keep qualified teachers. For example, in North Carolina, analysts found that the state labeling system made it more difficult

for the neediest schools to attract or retain high-quality teachers (Clotfelter *et al.*, 2003). Similarly, Florida's use of aggregate test scores, unadjusted for student characteristics, in allocating school rewards and sanctions led to reports that qualified teachers were leaving the schools rated 'D' or 'F' in droves, to be replaced by teachers without experience or training (DeVise, 1999). As one principal queried, 'Is anybody going to want to dedicate their lives to a school that has already been labeled a failure?'

Second, schools that have been identified as not meeting AYP standards stand to lose federal funding, thus having even fewer resources to spend on the students they are serving. Rather than seeking to ensure that students attend adequately funded and well-managed schools that would enable them to learn to higher levels, NCLB seeks to expand students' opportunities by offering them the chance to transfer out to other 'non-failing' public schools if their school is declared 'failing.' This option is to be funded through the resources of the 'failing' school, as are funds for supplemental services for such things as tutoring or after-school programs.

While the choice option may be a useful idea in theory, such alternatives are providing little overall improvement in the opportunities of most students in poor rural or inner-city schools, because—in addition to the fact that this option for some comes at the expense of school funding for their peers—there are frequently not 'non-failing' public schools with open seats available to transfer to nearby. The best schools are already quite full, and they have no incentive to admit low-income students with low test scores, poor attendance records or substantial educational needs who will 'bring down' their average and place the school at risk of receiving sanctions. Furthermore, the best-resourced schools are typically not close to the inner city or poor rural neighborhoods where struggling schools are concentrated. Thus, rather than expanding educational opportunities for low-income students and students of color, the law is more likely in many communities to reduce still further the quality of education available in the schools they must attend. A better approach would be to invest in the needed improvements in such schools in the first place, and to measure their progress on a variety of indicators in ways that give them credit for improvements they produce for the students they serve.

Alice in Wonderland accountability

Although the stated goals of No Child Left Behind are to improve achievement and enhance equity, its complex regulations for showing 'Adequate Yearly Progress' toward test score targets aimed at '100% proficiency' have created a bizarre situation in which schools that are improving and closing the achievement gap are often declared failing. For example, in San Diego, California, Marston Middle School, a well-regarded school that serves a diverse student population with a large number of low-income, minority and English language learning students, greatly improved achievement for all groups over several years as its faculty worked intensely on literacy development (Darling-Hammond *et al.*, 2003). In 2003, the first year of NCLB, Marston far exceeded its state and federal school growth targets, showing gains for Latino students and low-income students of more than four times the targeted

increases. However, the school failed to meet AYP because its white students, who already scored near the top on the state tests, did not improve ‘sufficiently’—largely because they had nearly hit the testing ceiling. While Marston Middle School did what NCLB presumably encourages—increase achievement and reduce the achievement gap—it was punished under the law.

Meanwhile, in Minnesota, where eighth-graders score first in the nation in mathematics and near the top in other subjects as well, more than 80% of public schools will soon be declared in ‘need of improvement’ and not long after, as ‘failing’ and in need of reconstitution. This is because, in the baffling world that federal policy has invented, schools in states with the highest standards will have the most schools found wanting, even if their students achieve at levels substantially above those of schools in other states. Consequently, many states formally lowered their standards in order to avoid having most of their schools declared failing. And states that worked hard to create forward-looking performance assessment systems during the 1990s have begun to abandon them for antiquated multiple-choice tests, since the more progressive approaches do not fit the federal mandate for annual testing that allows students and schools to be ranked and compared.

This not only reduces the chances that schools will be able to focus on helping students acquire critical thinking, research, writing and production abilities; it also reduces the chances that students who learn in different ways and have different talents will have opportunities to show what they have learned. Analysts have raised concerns about how the law’s requirements are leading to a narrower curriculum; to test-based instruction that ignores critical real-world skills, especially for lower-income and lower-performing students; and to less useful and engaging education (Neill, 2003). Equally important is the growing evidence that the law’s punitive approach may actually reduce access to education for the most vulnerable students, rather than increasing it.

Higher scores, fewer students

Perhaps the most adverse, unintended consequence of NCLB’s accountability strategy is that it undermines safety nets for struggling students rather than expanding them. The accountability provisions of the Act actually create large incentives for schools that can to keep such students out and to hold back or push out students who are not doing well. A number of studies have found that systems that reward or sanction schools based on average student scores create incentives for pushing low-scorers into special education so that their scores won’t count in school reports (Allington & McGill-Franzen, 1992; Figlio & Getzler, 2002), retaining students in grade so that their grade-level scores will look better (Haney, 2000; Jacob, 2002), excluding low-scoring students from admissions (Smith, 1986; Darling-Hammond, 1991) and encouraging such students to leave schools or drop out (Smith, 1986; Orfield & Ashkinaze, 1991; Haney, 2000).

Researchers have found higher rates of grade retention and dropping out in states and cities that have instituted test requirements for promotion or graduation (Orfield

& Ashkinaze, 1991; Heubert & Hauser, 1999; Roderick *et al.*, 1999; Clarke *et al.*, 2000; Jacob, 2001; Lilliard & DeCicca, 2001; Wheelock, 2003), as well as a widening gap in graduation rates between white and minority students (Orfield *et al.*, 2004). Schools' responses to the incentives created by high-stakes tests can cause gaming that produces higher scores at the expense of vulnerable students' education. Studies in New York, Texas and Massachusetts have showed how schools have raised their test scores while 'losing' large numbers of low-scoring students.

For example, recent studies have found that the 'Texas Miracle,' which was the model for the federal No Child Left Behind Act, boosted test scores in part by keeping many students out of the testing count and making tens of thousands disappear from school altogether (Dobbs, 2003). The 'disappeared' are mostly students of color. A longitudinal student-level study in one large Texas city found that the introduction of high-stakes graduation tests with school sanctions in the tenth grade was associated with sharp increases in ninth-grade student retention and high levels of student drop-out and disappearance. Of the large share of students held back in the ninth grade, most of them African American and Latino, only 12% ever made it to the tenth-grade test that drove school rewards. Grade retention was associated with increases in school tenth-grade test scores and related accountability ratings, and with higher rates of dropouts for students. Other gaming strategies included exempting students from testing via special education placement and LEP status, skipping students past key testing grades and transferring students to non-traditional settings (Heilig, 2006).

Overall, fewer than 70% of white students who enter ninth grade in Texas graduate from high school four years later, and the proportions for African American and Latino students are only 50% (Haney, 2000). Unhappily, the celebrated score gains for African American and Latino students appear in substantial part to be a function of high dropout and push-out rates for these students. Paradoxically, NCLB's requirement for disaggregating data and tracking progress for each subgroup of students increases the incentives for eliminating those at the bottom of each subgroup who struggle to learn, especially where schools have little capacity to improve the quality of services such students receive.

In Massachusetts, as a similar accountability system was phased in during the late 1990s, a 300% increase in middle school dropouts was recorded between 1997–98 and 1999–2000, along with greater proportions of students dropping out in ninth and tenth grades, disproportionately African American and Hispanic, and fewer dropouts returning to school. When the state introduced a high school exit exam for graduation in 2002, graduation rates decreased from 76% in 2002 to 72% in 2003, with much steeper declines for African American and Hispanic students. Meanwhile some of the steepest increases in test scores occurred in schools with the highest grade retention and dropout rates. For example, high schools receiving state awards for gains in tenth-grade pass rates on the Massachusetts test showed substantial increases in prior year ninth-grade retention rates and in the percentage of ninth-graders who went 'missing' before they reached tenth grade (Wheelock, 2003).

In New York City, evidence suggests that many of the city's high schools may be improving their test scores by pushing out weaker students who are unlikely to pass

the state's high school graduation tests, first imposed in 1999. By 2000–01, more than 55,000 high school students were 'discharged' without graduating, a number far larger than the 34,000 seniors who actually graduated from high school (Advocates for Children, 2002), and the number of school-age students in General Education Diploma (GED) programs run by the city schools (which provide an alternative route to a non-standard diploma) increased by more than 50% as the tests were phased in, from 25,500 to more than 37,000 (*New York Times*, 2001).

Similarly, a study of England's high-stakes accountability system (Rustique-Forrester, 2005) found that it led to a dramatic increase in the expulsion rate of students, while negatively affecting teachers' morale and instructional decision-making. Many teachers reported the pressures from school rankings and increased testing, combined with the dynamics of school choice and a prescriptive curriculum, helped to marginalize low-performing students and increase national exclusion rates.

Table 1 shows how this process operates. At 'King Middle School,' average scores increased from the 70th to the 72nd percentile between the 2002 and 2003 school year, and the proportion of students in attendance who met the standard (a score of 65) increased from 66% to 80%—the kind of performance that test-based accountability systems, including NCLB, celebrate and reward. Looking at subgroup performance, the proportion of Latino students meeting the standard increased from 33% to 50%, a steep increase.

However, *not a single student* at King improved his or her score between 2002 and 2003. In fact, the scores of every single student in the school went *down* over the course of the year. How could these steep improvements in the school's average scores and proficiency rates have occurred? A close look at Table 1 shows that the major change between the two years was that the lowest-scoring student, Raul, disappeared. As has occurred in many states with high-stakes testing programs, students who do poorly on the tests—special needs students, new English language learners, those with poor attendance, health or family problems—are increasingly likely to be excluded by being counseled out, transferred, expelled or by dropping out.

In Texas, New York, Massachusetts and many other states where tests alone are supposed to drive improvement, large numbers of students of color are taught by

Table 1. King Middle School: rewards or sanctions? The relationship between test score trends and student populations

	2002–03	2003–04
Laura	100	90
James	90	80
Felipe	80	70
Kisha	70	65
Jose	60	55
Raul	20	
	Av. score = 70	Av. score = 72
	% meeting standard = 66%	% meeting standard = 80%

under-prepared and inexperienced teachers—which, research shows, significantly affects passing rates on the state tests (Ferguson, 1991; Fetler, 1999; Fuller, 1998, 2000; Darling-Hammond, 2004a, b). Where states have replaced investing with testing, students in many communities are forced to attend under-resourced schools where they lack the texts, materials and qualified teachers needed for learning. Indeed, studies show that these schools—which lack a stable cadre of skilled teachers to develop stronger teaching strategies—have the least capacity to improve under accountability plans, and therefore are most likely to respond by excluding high-need students or gaming the system (Mintrop, 2003; Diamond & Spillane, 2002; Rustique-Forrester, 2005).

The current conditions of schooling for many students of color and low-income students in the United States strongly resemble those that existed before *Brown v. Board of Education* (1954) sought to end separate and unequal education. Unfortunately, NCLB, while rhetorically appearing to address these problems, actually threatens to leave more children behind. The incentives created by an approach that substitutes high-stakes testing for highly effective teaching are pushing more and more of the most educationally vulnerable students out of school earlier and earlier. In a growing number of states, high school completion rates for African American and Latino students have returned to pre-1954 levels. In these states, two-way accountability does not exist: The child is accountable to the state for test performance, but the state is not held accountable to the child for providing adequate educational resources.

The consequences for individual students who are caught in this no-win situation can be tragic, as most cannot go on to further education or even military service if they fail these tests, drop out or are pushed out to help their schools' scores look better. The consequences for society are also tragic, as more and more students are leaving school earlier and earlier—some with only a seventh or eighth grade education—without the skills to be able to join the economy. These students join what is increasingly known as a 'school-to-prison pipeline' (Wald & Losen, 2003), carrying an increasing number of undereducated youth almost directly into the criminal justice system. Indeed, prison enrollments have tripled since the 1980s and the cost of the criminal justice system has increased by more than 600% (while public education spending grew by only 25% in real dollars). More than half of inmates are functionally illiterate and 40% of adjudicated juveniles have learning disabilities that were not addressed in school (Darling-Hammond, 2004b).

States end up paying \$30,000 per inmate to keep young men behind bars when they were unwilling to provide even a quarter of this cost to give them good schools. Increasingly, this growing strain on the economy is deflecting resources away from the services that could make people productive. California and Massachusetts had the dubious distinction this past year of being the first states to pay as much for prisons as for higher education.

What it would take to really leave no child behind

There are many ways in which No Child Left Behind would need to be amended if it were to do less harm and more good, including supporting states to use more

thoughtful assessments, and to use them for improving curriculum rather than for punishing students or schools. School progress should be evaluated on multiple measures—including such factors as attendance, student progress and continuation, course passage and classroom performance on tasks beyond multiple-choice tests—and gains should be evaluated with measures showing how individual students improve over time, rather than school averages that are influenced by changes in who is assessed. Determinations of school progress should reflect a better grounded analysis of schools' actual performance and progress rather than a statistical gauntlet that penalizes schools serving the most diverse populations. Targets should be based on sensible goals for student learning that also ensure appropriate assessment for special education students and English language learners and credit for the gains these students make over time. And 'opportunity-to-learn standards,' specifying the provision of adequate materials, facilities and teachers, should accompany assessments of student learning.

Most important, investments should be made in the ability of schools to hire and support highly effective teachers and leaders, providing them with adequate resources and intensive opportunities to learn to teach struggling students. While recent studies have found that teacher quality is one of the most important school variables influencing student achievement (Darling-Hammond, 2000), teachers are the most inequitably distributed school resource (National Commission on Teaching and America's Future, 1996, 2003).

One of the great ironies of the federal education programs designed to support the education of students who are low income and who have greater educational needs is that schools have often served these students with unqualified teachers and untrained aides, rather than the highly skilled teachers envisioned by federal laws. The very purpose of decades of federal legislation—to ensure greater opportunities for learning for these students—has been undermined by local inability to provide them with teachers who know how to meet their needs.

In states that have lowered standards rather than increasing incentives to teaching, it is not uncommon to find urban and poor rural schools where one-third or more of the teachers are working without preparation, certification or mentoring (see e.g. Darling-Hammond, 2004b). In schools with the highest minority enrollments, students have less than a 50% chance of getting a mathematics or science teacher with a license and a degree in the field that they teach (Oakes, 1990). As a result, students who are the least likely to have learning supports at home are also least likely to have teachers who understand how children learn and develop, who know how to teach them to read and problem solve, and who know what to do if they are having difficulty.

Thus, one of the most important aspects of No Child Left Behind is that it requires all schools to provide 'highly qualified teachers' to all students. This requirement—that all teachers be fully certified and show competence in the subject areas they teach—is intended to correct this longstanding problem. However, the federal government has allowed states to call teachers 'highly qualified' before they have become prepared and met standards, and it has invested little in creating stronger preparation and incentives to teach.

This problem must be understood if it is to be solved. There are actually at least three or four times as many credentialed teachers in the USA as there are jobs, and many states and districts have surpluses. What often looks like a teacher shortage is actually mostly a problem of getting teachers from where they are trained to where they are needed and keeping teachers in the profession, especially in central cities and poor rural areas. More than 30% of beginners leave teaching within five years, and low-income schools suffer from even higher turnover rates (Darling-Hammond & Sykes, 2003). In this context, producing more teachers—especially through fast-track routes which tend to have high attrition—is like struggling to fill a leaky bucket rather than fixing it.

Not surprisingly, teachers are less likely to enter and stay in teaching where salaries are lower and working conditions are poorer. They are also more than twice as likely to leave if they have not had preparation for teaching and if they do not receive mentoring in their early years on the job (Henke *et al.*, 2000; National Commission on Teaching and America's Future, 2003). These are problems that can be successfully addressed through policy. States and districts that have increased and equalized salaries to attract qualified teachers, created strong preparation programs so that teachers are effective with the students they will teach and provided mentoring to beginners, have eliminated shortages, developed a strong teaching force and improved student achievement (for examples, see Darling-Hammond & Sykes, 2003).

But solving this problem everywhere requires national action. The distributional inequities that lead to the hiring of unqualified teachers are caused not only by disparities in pay and working conditions, but also by interstate barriers to teacher mobility, inadequate recruitment incentives to distribute teachers appropriately and fiscal conditions that often produce incentives for hiring the least expensive rather than the most qualified teachers. And while the nation actually produces far more new teachers than it needs, some specific teaching fields experience real shortages. These include teachers for children with disabilities and those with limited English proficiency as well as teachers of science and mathematics. Boosting supply in the fields where there are real shortfalls requires targeted recruitment and investment in the capacity of preparation institutions to expand their programs to meet national needs in key areas.

While No Child Left Behind sets an expectation for hiring qualified teachers, it does not include the policy support to make this possible. The federal government should play a leadership role in providing an adequate supply of well-qualified teachers just as it does in many other countries (see, for example, Darling-Hammond, 2005), and as it has in providing an adequate supply of well-qualified physicians in the USA. When shortages of physicians were a major problem more than 40 years ago, Congress passed the 1963 Health Professions Education Assistance Act to support and improve the caliber of medical training, create and strengthen teaching hospitals, provide scholarships to medical students and create incentives for physicians to train in shortage specialties and to locate in underserved areas. Similar federal initiatives in education were effective during the 1960s and 70s but were eliminated in the 1980s.

If the USA is to address one of the most important sources of inequality in its schools, it will need a federal teacher policy that will: (1) *recruit new teachers* who prepare to teach in high-need fields and locations, through service scholarships and forgivable loans that allow them to receive high-quality teacher education; (2) *strengthen teachers' preparation* through incentive grants to schools of education to create professional development schools, like teaching hospitals, to train prospective teachers in urban areas and to expand and improve programs to prepare special education teachers, teachers of English language learners and teachers in other areas where our needs exceed our current capacity; and (3) *improve teacher retention and effectiveness* by ensuring they have mentoring support during the beginning teaching stage when 30% of them drop out (for a discussion, see Darling-Hammond & Sykes, 2003).

For an annual cost equivalent to 1% of the Bush Administration's \$300 billion tax cut in 2003 or the equivalent of one week's combat costs during the War in Iraq, the nation could fully subsidize, with service scholarships, the high-quality preparation of 40,000 teachers annually to teach in high-need fields and high-need schools—enough to fill every new vacancy filled by an unprepared teacher each year; seed 100 top-quality urban teacher education programs; ensure mentors for all of the new teachers who are hired each year; and provide incentives to bring expert teachers into high-need schools. With focus, it would be possible to ensure that all students are taught by well-qualified teachers within the next five years.

Obviously, students will not learn to higher levels unless they experience good teaching, a strong curriculum and adequate resources. Merely adopting tests and punishments will not create an accountability system that increases the likelihood of good practice and reduces the likelihood of harmful practices. In fact, as we have seen, adopting punitive sanctions without investments increases the likelihood that the most vulnerable students will be more severely victimized by a system not organized to support their learning. A policy agenda that leverages equitable resources and invests strategically in high-quality teaching would support *real* accountability—that is, accountability to children and parents for providing the conditions under which students can be expected to learn.

Note

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